STATE OF MARYLAND

DHMH

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December 2, 2011

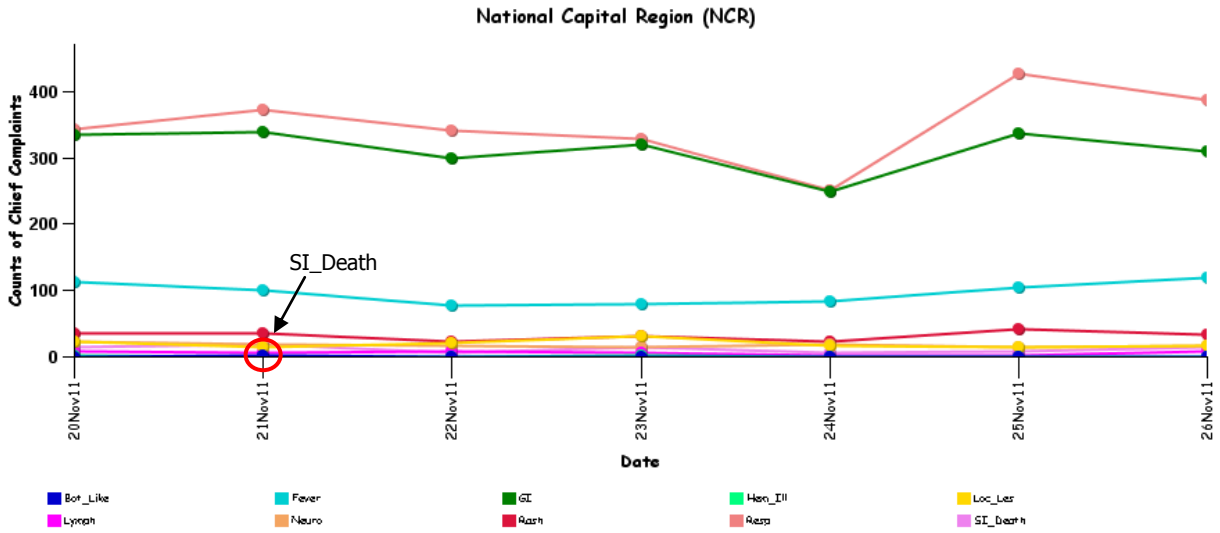
Public Health & Emergency Preparedness Bulletin: # 2011:47
Reporting for the week ending 11/26/11 (MMWR Week #47)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

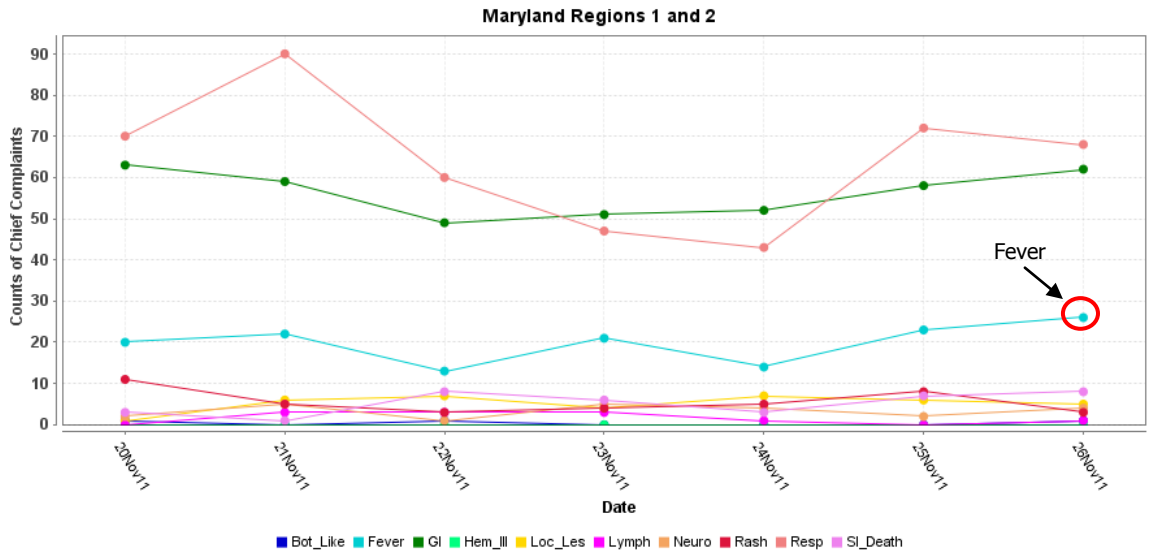
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

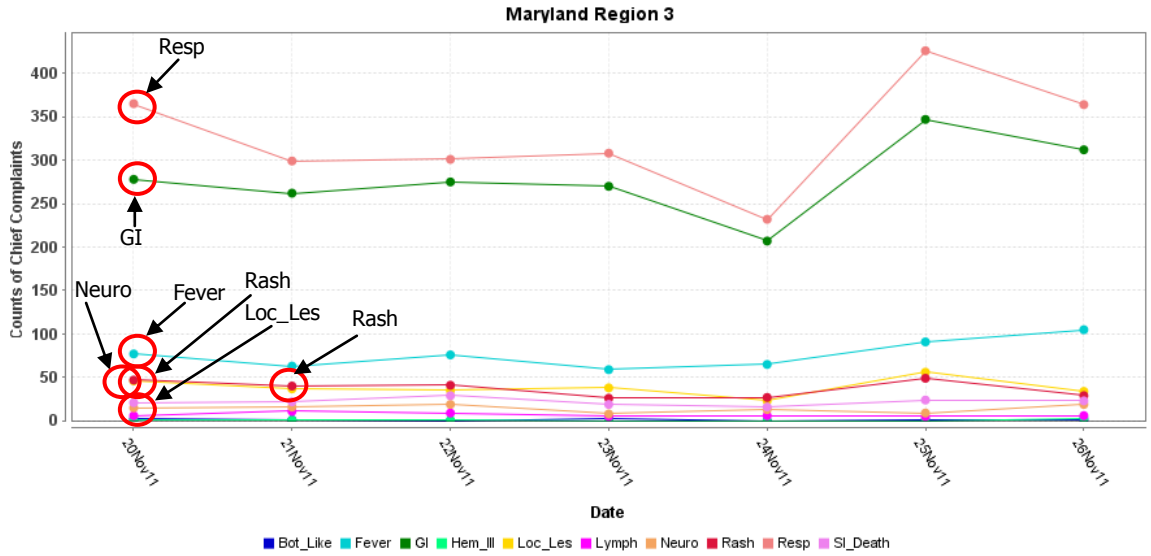


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

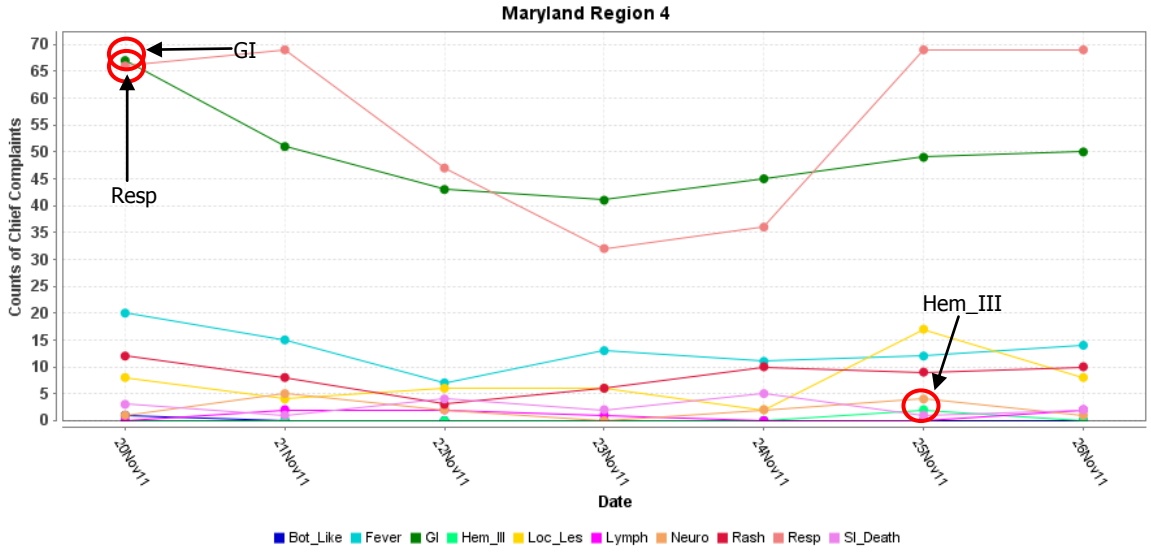
MARYLAND ESSENCE:



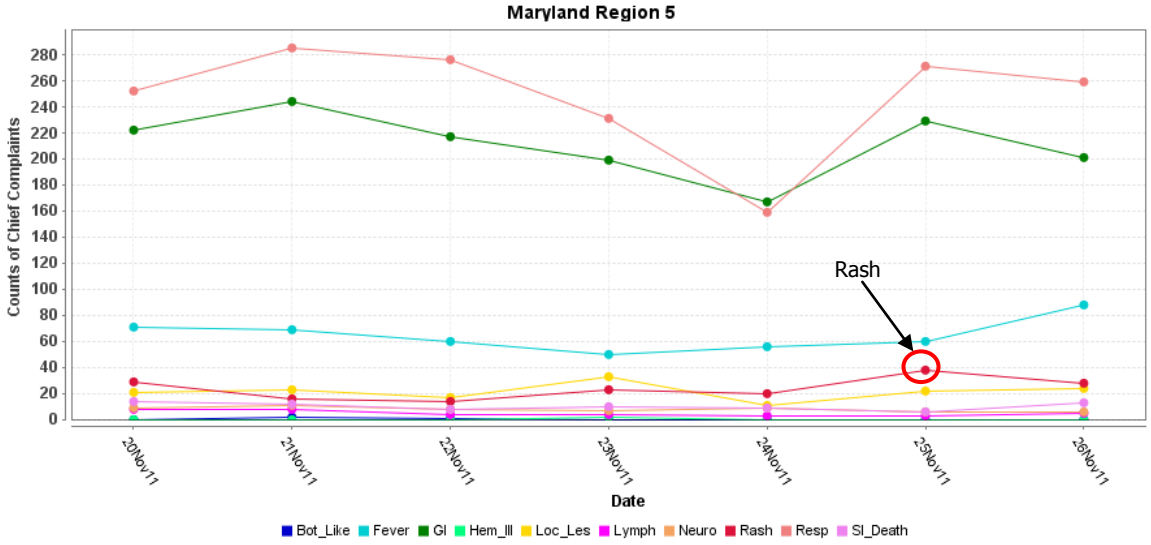
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



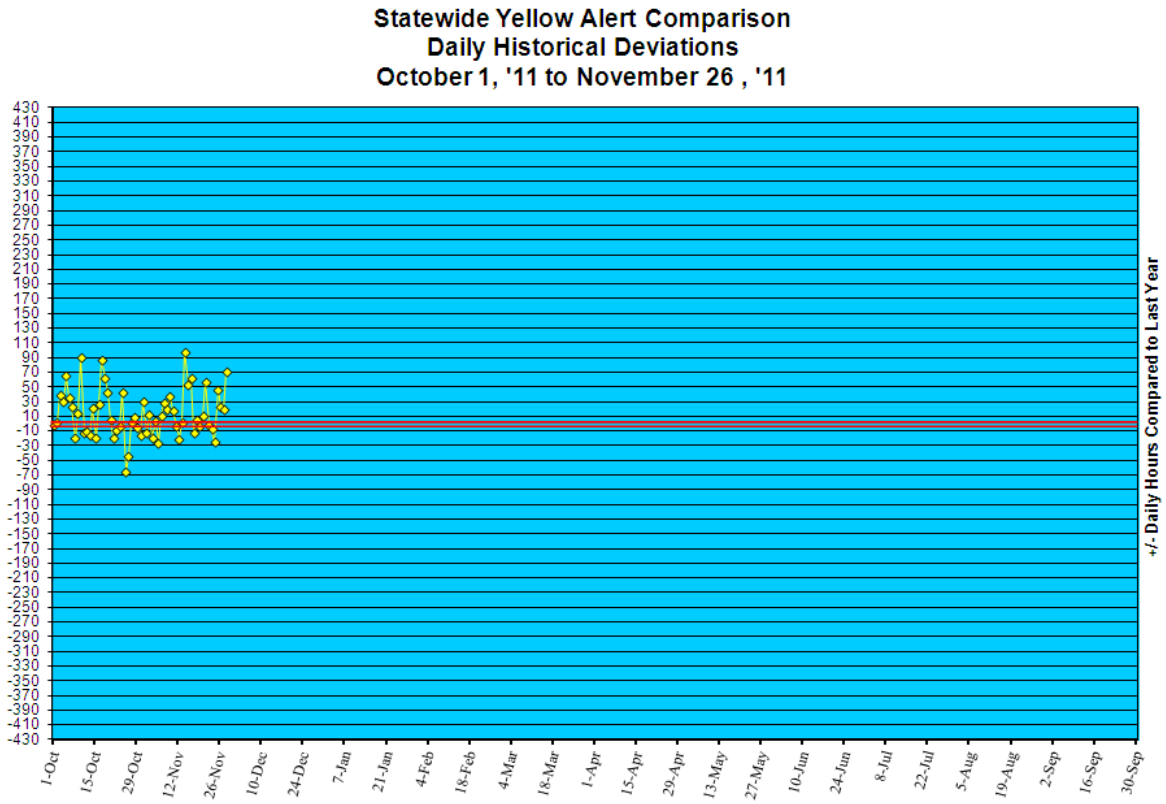
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in October 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (November 20 – November 26, 2011):	4	0
Prior week (November 13 – November 19, 2011):	15	0
Week#47, 2010 (November 21 – November 27, 2010):	5	0

0 outbreaks were reported to DHMH during MMWR week 47 (November 20-26, 2011)

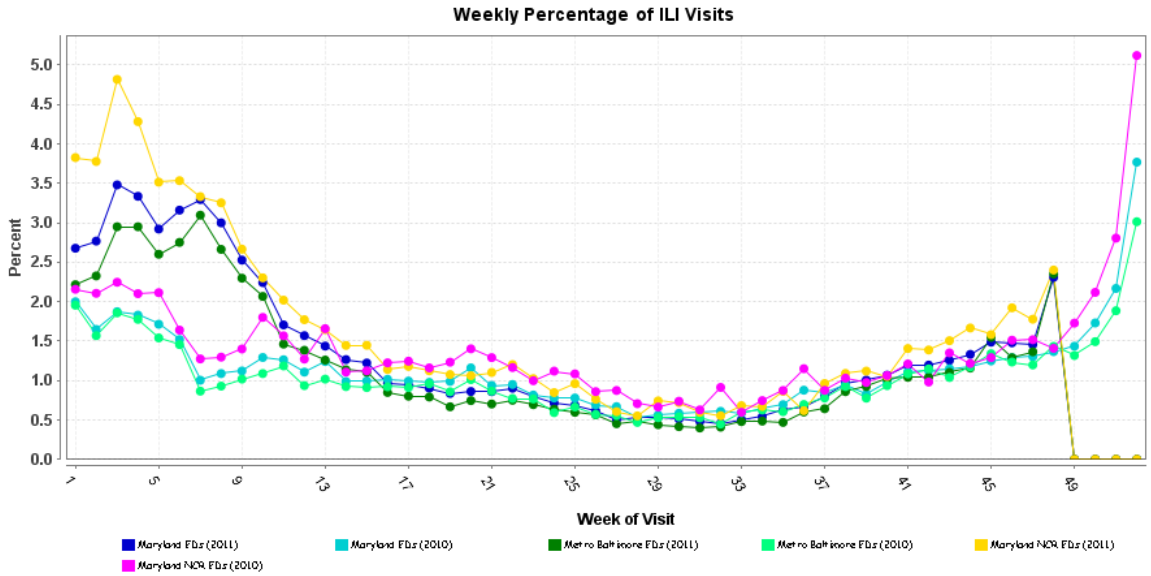
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 45 was: No activity, Minimal Intensity.

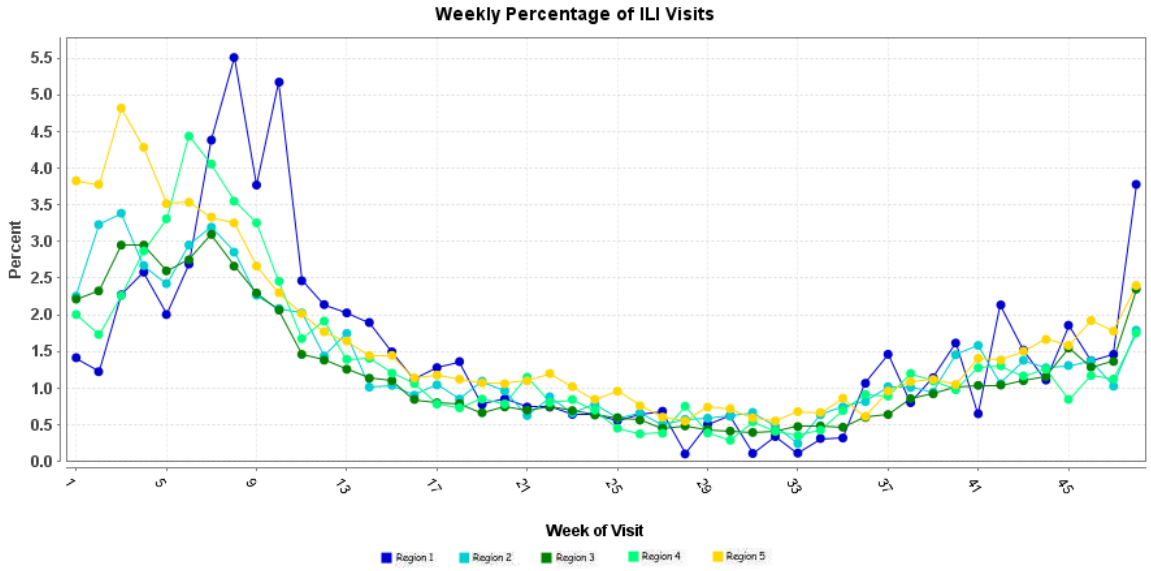
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



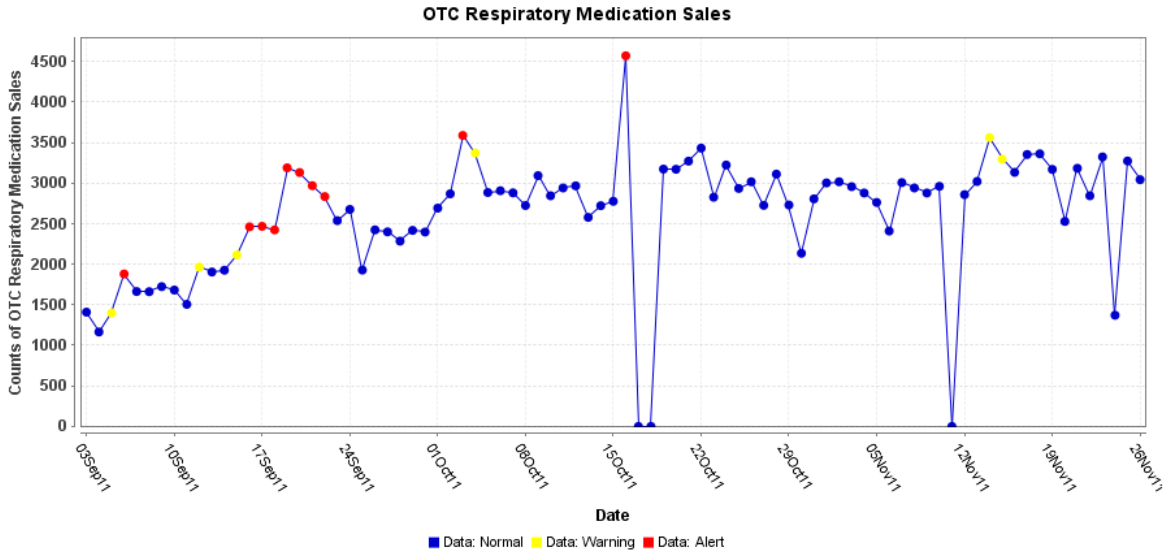
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

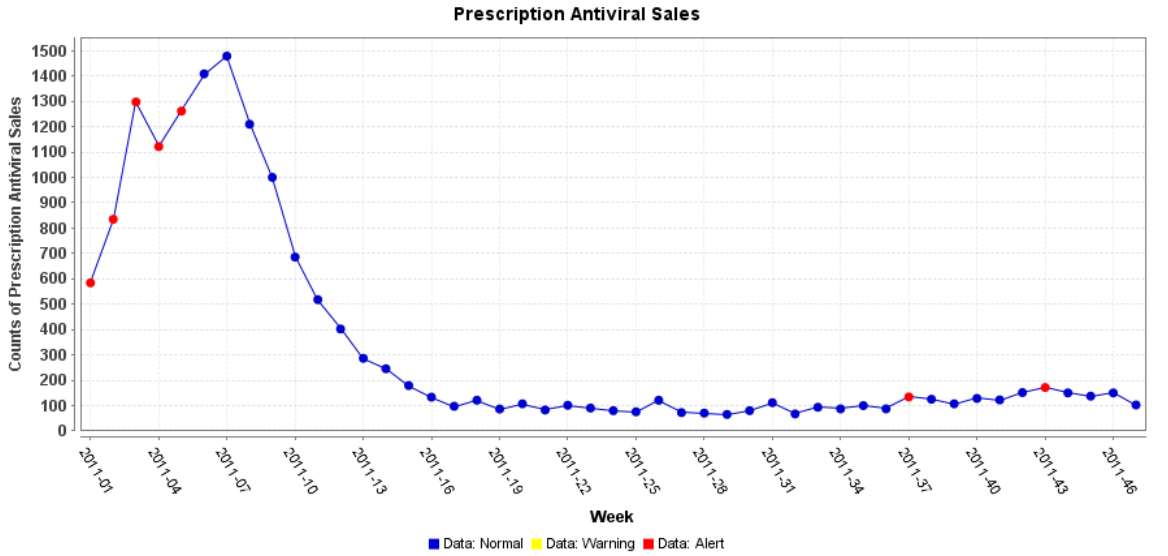
OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of November 15, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 570, of which 335 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS

E. COLI 0157 (WASHINGTON): 24 November 2011, A Tenino dairy's raw milk products are being recalled because they may be contaminated with bacteria that can cause severe intestinal distress. The Cozy Vale Creamery's whole and skim milk and cream are distributed through 7 retail outlets in Pierce, Thurston and King counties [in the state of Washington]. The products being recalled all have sell-by dates of 6 Dec 2011 or earlier. The company advised buyers to return the suspect milk products to the retailer where they bought it for a refund. The recall was begun after Washington State Department of Agriculture environmental swabbing at the facility discovered that locations in the milking parlor and processing areas were contaminated with toxin-producing *E. coli* [O157] bacteria. Cozy Vale and Agriculture Department officials are continuing their investigation into the source of the problem. 3 illnesses have been reported in Cozy milk customers since August 2011. Recalled raw milk products were sold from the on-farm store at 7018 Churchill Road in Tenino and from the following locations: Marlene's Market, 2951 S. 38th St., Tacoma; Olympia Food Co-op, 3111 Pacific Ave., Olympia; Olympia Food Co-op, 921 Rogers, Olympia; Olympia Local Foods, 2442 Mottman Road S.W., Tumwater; Yelm Co-op, 404 1st St., Yelm; Mt. Community Co-op, 105 Carter St., Eatonville, and Marlene's Market, 2565 S. Gateway Center Place, Federal Way. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, ST HEIDELBERG (USA): 23 November 2011, Chicken livers contaminated with *Salmonella Heidelberg* have now sickened 179 people in 6 states, the CDC reported Tue 22 Nov 2011. That is 22 more cases in 4 more states than the CDC reported 9 Nov 2011. The kosher broiled chicken livers, sold by Schreiber Processing Corp. of Maspeth, New York, under the MealMart brand, were recalled 8 Nov 2011. The chicken livers had been distributed to New York, New Jersey, Pennsylvania, Maryland, Minnesota, Ohio, Rhode Island, and Florida. Customers may have incorrectly thought the word "broiled" in the label meant the chicken livers were ready-to-eat, however they were not fully cooked, the CDC has speculated. In its latest report on the outbreak, the CDC said New York has now identified 99 cases of salmonellosis linked to the chicken livers, New Jersey has confirmed 61 related cases, Pennsylvania 10, Maryland 6, Ohio 2, and Minnesota 1. Those ill range in age from younger than 1 to 97 years old. Median age is 13. Of 126 people whom CDC has information about, 25 have been hospitalized. The illnesses began in March 2011 and continued through October 2011. In August 2011, the CDC noticed a "sustained increase," about 30 to 40 cases per month since June 2011, in the number of *S. Heidelberg* isolates with the outbreak strain reported by New York and New Jersey to PulseNet, the national foodborne illness surveillance system. Those states typically report only about 5 cases *of S. Heidelberg* a month. New York City conducted an enhanced epidemiologic investigation, which traced the source of the outbreak to the chicken livers. Lab tests in New York then identified the outbreak strain in samples of the MealMart chicken livers and in chopped liver made from the MealMart chicken livers. Consumers should discard any of these chicken liver products still in their homes, the CDC said. It also advised that chicken livers should be cooked to an internal temperature of 165 degrees and when partially cooked chicken livers are repackaged for sale, retailers should clearly label them as requiring further cooking. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

CAMPYLOBACTERIOSIS (ENGLAND): 25 November 2011, Health officials are investigating an outbreak of food poisoning which affected 80 guests at a 5-star hotel in Greater Manchester. Diners reported dizziness and vomiting after attending a charity dinner at The Lowry Hotel in Salford in October 2011. A spokeswoman for the Health Protection Agency (HPA) said its investigation with Salford City Council was ongoing. The Lowry Hotel said it was carrying out a full and in-depth investigation with environmental health experts. The HPA said the guests suffered from campylobacter, a bug which can be caused by undercooked meat. Dr Rosemary McCann, a consultant with the HPA's Greater Manchester unit, said: "Investigations are still ongoing, including analysis of a questionnaire returned by guests. Environmental health officers from Salford City Council are working with the hotel." General manager of The Lowry Hotel, Peter Kienast, said: "We are very sorry to hear that a number of guests fell ill following a function at our hotel in October. We are determined to get to the cause of the issue and the detailed investigation is reviewing every stage of the process from the food source itself to its delivery." He added: "This is the 1st incident of its kind in The Lowry Hotel's past 10 years. We are in contact with the organisers of the event and assisting them with any needs they may have as the investigation continues." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

Q FEVER (AUSTRALIA): 22 November 2011, James Cook University researchers have linked native mammals and pets to human cases of a [potentially] dangerous fever normally associated with stock animals. Of the 15 cases of Q fever reported nationally in October 2011, 10 were in Queensland. Traditionally, people in the meat industry were considered to be at risk of Q fever, but Townsville researcher Dr Brenda Govan says recent cases don't have that connection. "The people we've been seeing over the last few years are people without these risk factors," she said. Townsville Director of Pathology Dr Robert Norton said the city's expansion into bushland put more people at new risk. "We've shown that native mammals can carry these organisms perhaps more than cattle," he said. Dr Norton says the fever can be difficult to distinguish from influenza. "It's a fever that persists, and it presents itself differently in different people," he said. "About 20 percent of those affected by Q fever will be hospitalized, and 5 percent will develop chronic Q fever, which can affect the heart." An information night is being held for Townsville residents on 1 Dec 2011 at James Cook University. Volunteers will be asked to complete a questionnaire and provide a blood sample at the event. "We are interested in taking blood samples from any of the general public who would like to donate, as we can use the samples as negative controls in the study, as we don't yet have a good blood test for the disease, and this is what the study is trying to address," Dr Govan said. The study aims to find the sources of exposure in patients and to develop a new diagnostic test to enable a rapid diagnosis of Q fever. "It can be hard to diagnose, and testing can take weeks to complete; a new diagnostic test will help to speed up the diagnosis and treatment of Q fever to decrease the impact of this disease on patients," Dr Norton said. (Q Fever is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

TULAREMIA (TASMANIA): 22 November 2011, There have now been 2 human cases of tularemia diagnosed in Tasmania in 2011, 1 in June, the other in October. Both cases were women in their 40s, each bitten and/or scratched by separate possums (probably juvenile and probably ill) at points only a few kilometers apart along a remote road in western Tasmania. Both developed the ulcero-glandular form of tularemia, with ulceration at the site of the injury and prominent lymphadenitis. The 1st case recovered after a complicated course, the 2nd is improving on treatment. The microbiological collaboration between the Royal Hobart Hospital and Westmead Hospital laboratories has been crucial. Both diagnoses were supported by positive DFA [direct fluorescent-antibody assay] on excised or aspirated tissues. PCR-based characterization of genetic material from the 1st case suggested the strain of *Francisella tularensis* involved was *F. tularensis* subspecies *holarctica biovar japonica*. Therefore, the clinical and microbiological evidence to date points to these zoonotic infections (and possible epizootic) being due to one of the relatively less virulent strains of *F. tularensis*, that is, not the type A or subspecies *tularensis* strain more often associated with serious sepsis such as pneumonia and septicemia in parts of the northern hemisphere. The recent Tasmanian cases also appear to be different from the case acquired in the NT a decade ago (*F. novicida*). Public health actions so far have included information to animal handlers who might work in the area of the 1st case, wider public advice around wild animal contact via the media, and alerts to clinicians and laboratories. The extent of the risk-area for this infection within Tasmania is unclear, but based on these recent cases, may be relatively restricted. We will also address the possibility of risk from water, by reiterating existing guidance around protecting private water supplies from microbial hazards, and rendering raw water safe by boiling it. We are engaging with our Department of Primary Industry, Parks, Wildlife and the Environment around further investigations. These have begun. We would like to pass the following points on to infectious disease physicians, microbiologists, and their colleagues who may not previously have considered the possibility of tularemia acquired in the Southern Hemisphere. Clinical features that raise the possibility of Tasmanian-acquired *F. tularensis* infection include - an animal bite or scratch or close exposure to wild animals or their environment, particularly in the region of the West Coast of Tasmania; - persistent local soft tissue infection at the inoculation site and regional lymphadenitis, which may suppurate; - disease progression, or a poor response, with beta-lactam antibiotic therapy. *F. tularensis* is a major laboratory hazard; clinical specimens must be managed by a laboratory with PC3 [physical containment level 3] facilities. (Botulism is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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